

**TRIBHUVAN UNIVERSITY
INSTITUTE OF ENGINEERING
PULCHOWK CAMPUS**



Submitted by:

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Roll No: 080BCT023

Department: III/I

Submitted to:

Department of Electronics
and Computer Engineering

index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Chandan Shah - AI Engineer Portfolio</title>
  <link rel="stylesheet" href="style.css">
</head>
<body>
  <!-- Header Section -->
  <div class="header">
    <div class="container">
      <h1>CHANDAN SHAH</h1>
      <p class="subtitle">AI Engineer | Autonomous Agent Specialist | Multi-Agent Systems Expert</p>
      <div class="contact-info">
        <p>Kathmandu, Nepal | +977-9866010612</p>
        <p>
          <a href="mailto:letsradheshah@gmail.com">letsradheshah@gmail.com</a> |
          <a href="https://linkedin.com/in/chandan-shah" target="_blank">LinkedIn</a> |
          <a href="https://github.com/chandan11248" target="_blank">github.com/chandan11248</a>
        </p>
      </div>
    </div>
  </div>

  <!-- Professional Summary Section -->
  <div class="section">
    <div class="container">
      <h2>Professional Summary</h2>
      <p class="summary">
        Computer Engineering student specializing in autonomous AI agents and multi-agent systems with
      </p>
    </div>
  </div>

  <!-- Technical Skills Section -->
  <div class="section gray-bg">
    <div class="container">
      <h2>Technical Skills</h2>

      <div class="skill-category">
        <h3>Agentic AI & Multi-Agent Systems</h3>
        <p>LangChain (Expert) • LangGraph Agent Architectures • Multi-Agent Coordination • Autonomous
      </div>

      <div class="skill-category">
        <h3>LLMs & AI Development</h3>
        <p>OpenAI GPT-3.5/4 • Anthropic Claude • Prompt Engineering • RAG (Retrieval-Augmented Genera
      </div>

      <div class="skill-category">
        <h3>ML & AI Fundamentals</h3>
        <p>PyTorch • Transformer Architecture • Embeddings • Reinforcement Learning Concepts • Natur
      </div>

      <div class="skill-category">
        <h3>Development & Integration</h3>
        <p>Python (Advanced) • FastAPI • RESTful API Design • Webhooks • API Integration & Orchestrat
      </div>

      <div class="skill-category">
        <h3>Data & Knowledge Systems</h3>
        <p>Vector Databases (Pinecone, ChromaDB, FAISS) • Embedding Models • Knowledge Graph Integrat
      </div>

      <div class="skill-category">
        <h3>Orchestration & Deployment</h3>
        <p>n8n Workflow Automation • Multi-step Task Planning • Error Handling & Retry Logic • Monit
      </div>
    </div>
  </div>

  <!-- Key Projects Section -->
```

```

<div class="section">
  <div class="container">
    <h2>Key Projects</h2>

    <div class="project">
      <h3>Autonomous Multi-Agent Research & Execution System</h3>
      <p class="tech-stack">LangChain • LangGraph • n8n • OpenAI API • Python</p>
      <ul>
        <li>Architected autonomous AI agent with reasoning, planning, and multi-step task execution</li>
        <li>Implemented multi-agent collaboration using LangGraph for parallel task delegation, coordination, and handoff</li>
        <li>Integrated tool usage capabilities (web scraping, API calls, data summarization) with dynamic tool discovery</li>
        <li>Deployed production-ready orchestration using n8n with comprehensive error handling, logging, and monitoring</li>
        <li>Built self-correction mechanisms enabling agents to evaluate outputs and iteratively improve performance</li>
      </ul>
    </div>

    <div class="project">
      <h3>Enterprise RAG Chatbot with Intelligent Document Querying</h3>
      <p class="tech-stack">LangChain • Pinecone/ChromaDB • FastAPI • OpenAI Embeddings</p>
      <ul>
        <li>Developed Retrieval-Augmented Generation (RAG) system enabling natural language queries over enterprise document repositories</li>
        <li>Engineered semantic search using vector embeddings to minimize hallucinations and improve relevance</li>
        <li>Built RESTful API using FastAPI for seamless integration with web platforms and third-party applications</li>
        <li>Optimized context window management and prompt engineering strategies for complex multi-turn conversations</li>
        <li>Implemented evaluation metrics to track agent performance, detect drift, and ensure consistent output quality</li>
      </ul>
    </div>

    <div class="project">
      <h3>Agentic Workflow Automation Platform</h3>
      <p class="tech-stack">n8n • LangChain Agents • Claude API • JavaScript • Python</p>
      <ul>
        <li>Designed intelligent automation workflows integrating LLMs with decision-making logic and external tool integrations</li>
        <li>Created agent memory systems and context persistence across multi-turn interactions for stateful automation</li>
        <li>Implemented real-time monitoring dashboards tracking agent performance, success rates, and execution time</li>
        <li>Developed sophisticated orchestration layers coordinating multiple specialized agents for complex tasks</li>
        <li>Built scalability testing framework ensuring system reliability under production loads and high concurrency</li>
      </ul>
    </div>

    <div class="project">
      <h3>Custom GPT-2 Transformer Implementation from Scratch</h3>
      <p class="tech-stack">Python • PyTorch • NumPy</p>
      <ul>
        <li>Implemented full GPT-2 architecture (124M parameters) from first principles, demonstrating deep understanding of transformer mechanics</li>
        <li>Manually coded tokenization pipelines, multi-head self-attention layers, and feed-forward networks</li>
        <li>Applied reinforcement learning concepts and AI planning algorithms to optimize model performance on text generation tasks</li>
      </ul>
    </div>
  </div>
</div>

<!-- Education Section -->
<div class="section gray-bg">
  <div class="container">
    <h2>Education</h2>
    <div class="education">
      <h3>Bachelor of Engineering in Computer Engineering</h3>
      <p class="institution">Tribhuvan University, Institute of Engineering, Pulchowk Campus – Lalitpur, Nepal</p>
      <p class="date">Expected 2028</p>
      <p><strong>Relevant Coursework:</strong> Artificial Intelligence • Machine Learning • Data Structures • Algorithms</p>
    </div>
  </div>
</div>

<!-- Certifications Section -->
<div class="section">
  <div class="container">
    <h2>Certifications & Continuous Learning</h2>
    <ul class="certifications">
      <li>Data Science & Machine Learning - DataCamp</li>
      <li>Building LLM Applications with LangChain - Completed</li>
      <li>Advanced Prompt Engineering - OpenAI & Anthropic Documentation</li>
      <li>Deep Learning Specialization - Self-Paced Research & Implementation</li>
      <li>Active contributor to AI/ML research communities and open-source experimentation</li>
    </ul>
  </div>
</div>

```

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</div>

<!-- Additional Strengths Section -->
<div class="section gray-bg">
  <div class="container">
    <h2>Additional Strengths</h2>
    <div class="strengths">
      <div class="strength-item">
        <h3>Problem-Solving</h3>
        <p>Strong analytical skills with focus on model reliability, accuracy, and scalability</p>
      </div>
      <div class="strength-item">
        <h3>Collaboration</h3>
        <p>Excellent communication abilities and experience working cross-functionally</p>
      </div>
      <div class="strength-item">
        <h3>AI Ethics</h3>
        <p>Passionate about privacy, security, and responsible AI in autonomous systems</p>
      </div>
      <div class="strength-item">
        <h3>Continuous Learning</h3>
        <p>Actively exploring emerging AI research in multi-agent systems, real-time reasoning, and reinforcement learning</p>
      </div>
      <div class="strength-item">
        <h3>Practical Focus</h3>
        <p>Proven ability to translate cutting-edge research into production-ready enterprise solutions</p>
      </div>
    </div>
  </div>
</div>

<!-- Footer -->
<div class="footer">
  <div class="container">
    <p>&copy; 2026 Chandan Shah. All rights reserved.</p>
  </div>
</div>
</body>
</html>

```

style.css

```

/* Basic Styles for Body */
body {
  font-family: Arial, sans-serif;
  background-color: lightgray;
  color: black;
  margin: 0;
  padding: 0;
}

/* Container */
.container {
  width: 90%;
  margin: 0 auto;
  padding: 20px;
}

/* Header */
.header {
  background-color: purple;
  color: white;
  padding: 40px;
  text-align: center;
}

.header h1 {
  font-size: 36px;
  margin-bottom: 10px;
}

.subtitle {

```

```

        font-size: 18px;
        margin-bottom: 20px;
    }

    .contact-info {
        margin-top: 15px;
    }

    .contact-info p {
        margin: 5px;
    }

    .contact-info a {
        color: white;
        text-decoration: underline;
    }

    /* Section */
    .section {
        padding: 40px 0;
        background-color: white;
    }

    .gray-bg {
        background-color: #e8e8e8;
    }

    .section h2 {
        font-size: 28px;
        color: purple;
        margin-bottom: 20px;
        border-bottom: 2px solid purple;
        padding-bottom: 10px;
    }

    /* Summary */
    .summary {
        font-size: 16px;
        line-height: 1.6;
        margin-bottom: 20px;
    }

    /* Skills */
    .skill-category {
        margin-bottom: 20px;
    }

    .skill-category h3 {
        font-size: 20px;
        color: darkpurple;
        margin-bottom: 10px;
    }

    .skill-category p {
        font-size: 15px;
        line-height: 1.5;
    }

    /* Projects */
    .project {
        margin-bottom: 30px;
        padding: 20px;
        background-color: #f5f5f5;
        border-left: 3px solid purple;
    }

    .project h3 {
        font-size: 22px;
        margin-bottom: 10px;
    }

    .tech-stack {
        color: purple;
        font-weight: bold;
        margin-bottom: 10px;
    }

    .project ul {

```

```

        margin-left: 25px;
    }

    .project li {
        margin-bottom: 8px;
    }

    /* Education */
    .education {
        padding: 15px;
        background-color: white;
    }

    .education h3 {
        font-size: 22px;
        margin-bottom: 10px;
    }

    .institution {
        font-size: 16px;
        color: purple;
    }

    .date {
        font-style: italic;
        color: gray;
        margin-bottom: 10px;
    }

    /* Certifications */
    .certifications {
        margin-left: 25px;
    }

    .certifications li {
        margin-bottom: 10px;
    }

    /* Strengths */
    .strengths {
        margin-top: 20px;
    }

    .strength-item {
        margin-bottom: 20px;
        padding: 15px;
        background-color: white;
    }

    .strength-item h3 {
        font-size: 18px;
        color: purple;
        margin-bottom: 8px;
    }

    .strength-item p {
        font-size: 14px;
    }

    /* Footer */
    .footer {
        background-color: black;
        color: white;
        text-align: center;
        padding: 25px;
    }

    .footer p {
        margin: 0;
    }

```